

Abstract of the Invention

A minimally invasive method for treating varices including pelvic varices in females, varicoceles, and also oesophageal varices is disclosed. The method comprises the steps of inserting a catheter device into the blood vessels of a patient and advancing the distal end of the catheter to reach the varix or varices. The insertion may be made in the femoral vein or in other vessels as appropriate. Preferably, x-ray, angiography, or other imaging techniques are used to visualize and position the catheter. An optical fiber or optical fiber bundle is then inserted into the catheter and the distal end is advanced to a predetermined point near the varix or varices. Laser energy of preferably 980 nm is then transmitted to the varix to close the blood vessel. Imaging techniques such as angiographies may again be performed to confirm closure of the vein. The method is an out-patient procedure that requires no incision or general anesthesia, requires no recovery time, and does not require that any foreign objects be left in the body. This method has been shown to have a higher success rate than previous embolization and surgical procedures.